The City of London is entering a new chapter in our history - one focused on improving mobility options for residents. Rapid Transit is a key part of this new vision along with reshaping land use.

We’re launching a Rapid Transit Corridors Environmental Assessment Study and you’re encouraged to participate by attending the first Public Information Centre (PIC) to start the conversation on rapid transit.

This event will feature a panel of distinguished guests presenting ideas and inspiration for London’s Rapid Transit Initiative.

PANEL DISCUSSION & PUBLIC INFORMATION CENTRE #1
Wednesday, February 4, 2015

London Public Library, Central Branch (Wolf Performance Hall and Stevenson & Hunt Meeting Room), 251 Dundas Street, London

Open House 5 p.m. – 7 p.m.
Panel Discussion starts at 7 p.m.
Register at www.london.ca/RapidTransit

Also look for our study booth at the London Lifestyle Home Show, Agriplex, Western Fair District, January 30 – February 1, 2015.

Information on this project will be made publicly available on the City of London’s web site at www.london.ca/RapidTransit or through contacting either of the following project representatives:

Edward Soldo, P. Eng.
Director of Roads and Transportation
City of London
Tel: 519-661-2500 ext. 4936
esoldo@london.ca

Brian Hollingworth, P. Eng.
Director
IBI Group
Tel: 519-472-7328
bhollingworth@IBIGroup.com

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.
Join us today for a discussion about our Rapid Transit Initiative. Featured panelists will provide their perspectives on what other cities have achieved by implementing Rapid Transit and how London can build on these successes. City and consultant staff will also present information on London’s current Rapid Transit Corridors Environmental Assessment.

**Agenda**

5:00 PM – 7:00 PM  Open House, Stevenson and Hunt Rooms
7:00 PM – 8:30 PM  Panel Discussion, Wolf Performance Hall
8:30 PM – 9:00 PM  Closing Remarks

**Guest Panelists**

- **Hazel McCallion**  Former Mayor of Mississauga
- **Michael Roshlau**  President and CEO of the Canadian Urban Transit Association
- **Dr. Jeff Casello**  Associate Professor, Civil Engineering and Planning, University of Waterloo
Shift is a bold and important initiative for transportation for London. It focuses on Rapid Transit as part—along with cars, buses, bikes and pedestrians—of the transportation system that will help our city grow and prosper.

What is Shift?

What will Shift achieve?

Shift will define where Rapid Transit will go, what it will look like, and how it will be implemented.

Shift is about finding environmentally sustainable ways to move people in London faster and create great places to live and work. And, it’s about developing the foundations to make London attractive for investment.
How will Shift be undertaken?

Shift starts with an Environmental Assessment (EA) – a public process that provides all citizens with an opportunity have input in planning and designing a Rapid Transit network.

The 1st stage of Shift will be completed by Fall 2015

- the need for Rapid Transit
- the problems that Rapid Transit can help solve such as congestion, over-crowded buses, the high cost of driving
- which streets are suitable for Rapid Transit and how streets can be designed to improve mobility for everyone no matter how they travel
- determine the form of Rapid Transit, including types of vehicles

The 2nd stage of Shift will be completed by Summer 2016

- develop a detailed design for the preferred Rapid Transit routes
- provide a plan to build the Rapid Transit network including how it will be funded
What is Rapid Transit?

Rapid Transit means the movement of many people, at the same time, and at higher speeds using vehicles such as buses or trains.

- Rapid Transit creates vibrant livable communities
- Rapid Transit gets people where they want to go faster
- Rapid Transit is more than trains and buses
- Rapid Transit is of interest to everyone
What are the benefits of Rapid Transit?

Whether you are a current transit rider or die-hard car lover, investments in Rapid Transit could benefit you and the City of London. Here are some potential benefits:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Benefit Description</th>
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<tbody>
<tr>
<td><strong>Make transit a more attractive choice</strong></td>
<td>Transit trips will be up to 50% faster with Rapid Transit</td>
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<tr>
<td><strong>Reduced congestion on streets</strong></td>
<td>By 2030, 25% more cars will be on London roadways</td>
</tr>
<tr>
<td><strong>Increase people activity in business areas</strong></td>
<td>Will increase pedestrian activity around transit villages, Rapid Transit stations and downtown</td>
</tr>
<tr>
<td><strong>Create jobs, attract talent and investment</strong></td>
<td>77,000 new residents and 43,000 more jobs will call London home by 2035</td>
</tr>
<tr>
<td><strong>Encourage compact and walkable communities</strong></td>
<td>Mixed-use, transit-oriented development will enhance the public realm</td>
</tr>
<tr>
<td><strong>Reduce emissions and create greener London</strong></td>
<td>Reducing the number of auto trips will keep the air cleaner</td>
</tr>
<tr>
<td><strong>Save households income</strong></td>
<td>Families can save $7,500 per year for each extra vehicle they avoid</td>
</tr>
<tr>
<td><strong>Protecting agricultural lands</strong></td>
<td>Accommodating growth in the current urban area prevents urban sprawl</td>
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</table>
Rapid Transit Needs & Opportunities

Opportunities for Rapid Transit
• Existing ridership along major corridors is strong, and growing each year
• Density along the potential corridors is high and there is an opportunity for intensification
• Is a catalyst for urban regeneration, community building and economic investment
• London is positioned to reshape land use through The London Plan (draft) and Transportation Master Plan

Needs for Rapid Transit
• Transit is not presently a viable choice for all trips due to slower speeds
• The existing road network lacks resiliency to accommodate future growth
• Existing land use and intensification trends are not supportive of quality transit
• Future growth needs to take place in a balanced approach
Elements of Rapid Transit

Vehicles

Right-of-Way

Stations

Fare payment

Smart Technologies
The London Plan (draft) calls for the City to reshape how it grows by directing 40% of new development downtown and along the Rapid Transit corridors. Rapid Transit will play an integral part in connecting new and existing residents to destinations across the city.

The Smart Moves 2030 Transportation Master Plan provides enhanced mobility choices in London to create a multi-modal transportation system. The plan sets a 20% mode share target for public transit by 2030, up from 12.5% today.
Cities build Rapid Transit to achieve many objectives – economic growth, mobility, community building.

The prioritization of these objectives can, and should, influence the design of Rapid Transit.
There will be multiple opportunities for participation in the process. In fact, we want to hear from you throughout the process.

Formal consultation events, referred to as Public Information Centres, will be held at the key stages in the study:

- Public Information Centre #1 will introduce the study and its objectives (today)
- Public Information Centre #2 will present the preferred planning solution
- Public Information Centre #3 will focus on alternative design solutions for the preferred corridor
- Public Information Centre #4 will present the final design solution and implementation strategy
Our Rapid Transit Initiative

Public Information Centre #1
February 4, 2015
What is Shift?

• **Shift** is the name for our Rapid Transit Environmental Assessment. It is a bold and important initiative for transportation for London. It focuses on rapid transit as part – along with cars, buses, bikes and pedestrians – of the transportation system that will help our city grow and prosper.

• **Shift** will define where Rapid Transit will go, what it will look like, and how it will be implemented.

• **Shift** is about finding environmentally sustainable ways to move people in London faster and create great places to live and work. It’s about developing the foundations to make London attractive for investment.

• **Shift** is about *Moving London Forward*. 
What is Rapid Transit?

• **Means the movement of many people, at the same time, and at higher speeds using vehicles such as buses or trains**
Pillars of Rapid Transit?

- Cities build rapid transit to achieve many objectives – economic growth, mobility, community building

- The prioritization of these objectives can, and should, influence the design of rapid transit
Rapid Transit for London: The Time is Right
CUTA – Who are we?

Our mission:
To inspire and influence the evolution of integrated urban mobility.

- 125 urban transit systems
- 280 business members (manufacturers and consultants)
- 20 government agencies
- 80 affiliates
• Society will look very different

• Growth of cities, an aging population, immigration, and changing lifestyles will be major factors

• Many smaller communities and rural areas will see a decline in population
• Mobility will be a major issue. Road congestion will continue to rise

• Energy uncertainty

• Environmental progress will be made but challenges remain

Support for transit will strengthen.
• Carbon emissions will moderate

• Growing support for sustainable practices will lead to a greater willingness to adopt lifestyle change

Walking and cycling will become more popular and better integrated into our lifestyles.
Major Themes

1. Putting Transit at the Centre of Communities
2. Revolutionizing Service
3. Focusing on Customers
4. Greening Transit
5. Ensuring Financial Health
6. Strengthening Knowledge and Practice
Per-Capita Ridership Targets

Major Metropolitan Areas
- 2007: 115 rides
- 2040: 175 rides
- 50% increase

Large Cities
- 2007: 80 rides
- 2040: 120 rides
- 50% increase

Medium Cities
- 2007: 49 rides
- 2040: 85 rides
- 75% increase

Small Cities & Small/Rural Communities
- 2007: 20 rides
- 2040: 40 rides
- 100% increase

London = 63 in 2013
Endorsements
Major cities with rapid transit
Rationale for Building Rapid Transit

1. Capacity saturation
Rationale for Building Rapid Transit

2. Event catalyst
Rationale for Building Rapid Transit

3. Urban development
Rationale for Building Rapid Transit

1950
1960
1970
1980
1990
2000
2010
2020

Year Opened

Urban Development

Event Catalyst

Capacity Saturation

Toronto Subway
Montreal Metro
Edmonton LRT
Calgary Ctrain
Ottawa Transitway
Vancouver Skytrain
Quebec City Metrobus
Winnipeg Transitway
York Region Viva
Brampton Zum
Mississauga MiExpress
Waterloo Ion

1950
1960
1970
1980
1990
2000
2010
2020
Toronto - 1954
Montréal - 1967
Edmonton - 1978
Calgary - 1981
Ottawa - 1983
Vancouver - 1986
Greater Toronto Area
THE NEW RT

Drivers are waiting in line to see it.

The new RT

Nothing goes 0-80 km/h faster, in rush hour.

The new RT

Comes standard with A/C, plush seats and room for 40.

Winnipeg - 2012
Waterloo - 2017

CONSTRUCTION AHEAD
Let’s Build This
www.rideion.ca
Rapid Transit for London: The Time is Right
Investing in Rapid Transit: Experience from the Region of Waterloo

Jeffrey M. Casello, P.E.
Associate Professor
School of Planning
Department of Civil and Environmental Engineering

4 February 2015
Presentation Outline

- What are the factors in the Region of Waterloo that motivated investment in rapid transit?
- What are the project components: land use and transportation?
- What are the realized / expected benefits?
- What challenges have been encountered?
- What are the lessons learned?
Motivating Investment

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research
Motivating Investment

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
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Regional Growth Management Strategy: Incentivizing “Intensification”

How can the Region / municipalities:

- Make living, working, and entertainment more attractive in existing, built-up corridors?
- Reduce the outward growth and negative environmental impacts?
- Provide viable transportation alternatives that reduce dependency on the automobile?
Project Components – Land Use Regulation

**Provincial Policy**
Provincial Policy Statement (2005)

**Regional Plans and Policy**
Adopted Regional Official Plan (2009)

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Brownfield Redevelopment: What You Should Know

How is brownfield remediation regulated in Ontario? Further Information

Visualizing Densities Part II: Future Possibilities
Project Components – Rapid Transit

Project Data:
19 km LRT – 22 stations; 16 km aBRT
$818M Capital Cost
32% Fed, 37% Prov, 31% Local
P3 - DBFOM
Construction 2014, operations 2017
Project Components – Rapid Transit

Grandlinq Consortium:

- Plenary Group – Public Private Partnership (P3)
- Meridiam Infrastructure – finances
- AECON – local planning / engineering consultants
- Kiewit – contractor
- Keolis – operator
- Bombardier – vehicles
Project Components – Rapid Transit

Project Timeline:

- **May 2004**: Planning Our Future
  - Funding for growth management strategy and feasibility studies

- **2005**: Places to Grow
  - LA begins

- **January 2006**: Growth Plan
  - Feasibility study concludes

- **June 2009**: LRT selected as preferred technology

- **2010**: Fed and ON gov’ts announce funding
  - Public concerns raised over affordability

- **June 2011**: Regional Council approves LRT

- **August 2011**: Local consultation process begins

- **November 2011**: Transit Project Assessment Process
  - Notice of Commencement is issued

- **February 2012**: Regional Council approves the procurement and delivery option

- **March 2012**: Notice of Completion of Environmental Project Report is issued

- **2014**: Construction begins

- **Fall 2017**: LRT operational
Project Components – Upgraded Conventional Transit

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research
Realized / Expected Benefits: Land Use

Development industry responses

THE TANNERY DISTRICT
KITCHENER - MIXED USE CONVERSION
(FORMER FACTORY)
Realized / Expected Benefits: Land Use

The Bauer Lofts
WATERLOO - MIXED USE CONVERSION - HOUSING AND RETAIL (FORMER FACTORY)
Realized / Expected Benefits: Land Use

THE BARREL YARDS
WATERLOO - MIXED USE CONVERSION - HOUSING AND RETAIL

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research
Realized / Expected Benefits: Transport

Rapid gains in transit ridership

Region becomes responsible for transit service

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research
Realized / Expected Benefits: Transport

Decreasing operating costs per person
Realized / Expected Benefits: Transport

More balanced transportation

<table>
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<tr>
<th>Mode</th>
<th>Cambridge</th>
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<tr>
<td></td>
<td>Person Trips</td>
<td>Share</td>
<td>Person Trips</td>
<td>Share</td>
<td>Person Trips</td>
<td>Share</td>
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<tr>
<td>Auto Driver</td>
<td>26,758</td>
<td>62.8%</td>
<td>37,096</td>
<td>56.0%</td>
<td>31,511</td>
<td>54.1%</td>
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<tr>
<td>Auto Passenger</td>
<td>5,550</td>
<td>13.0%</td>
<td>7,694</td>
<td>11.6%</td>
<td>6,136</td>
<td>10.5%</td>
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<tr>
<td>Local Transit</td>
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<td>11.8%</td>
<td>11,280</td>
<td>17.0%</td>
<td>10,475</td>
<td>18.0%</td>
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<tr>
<td>School Bus</td>
<td>886</td>
<td>2.1%</td>
<td>1,838</td>
<td>2.8%</td>
<td>1,016</td>
<td>1.7%</td>
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<tr>
<td>Cycle</td>
<td>831</td>
<td>1.9%</td>
<td>1,801</td>
<td>2.7%</td>
<td>2,646</td>
<td>4.5%</td>
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<tr>
<td>Walk</td>
<td>3,396</td>
<td>8.0%</td>
<td>6,110</td>
<td>9.2%</td>
<td>6,244</td>
<td>10.7%</td>
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<tr>
<td>Other</td>
<td>183</td>
<td>0.4%</td>
<td>396</td>
<td>0.6%</td>
<td>225</td>
<td>0.4%</td>
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<tr>
<td>Total</td>
<td>42,616</td>
<td>100.0%</td>
<td>66,215</td>
<td>100.0%</td>
<td>58,253</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Realized / Expected Benefits: Transport

The “not-so-obvious” benefits of rapid transit:

- Higher density land use means less infrastructure to build / maintain – lower property taxes;
- Higher density in urban cores protects rural, suburban character;

Figure 36 – Road network, physical condition

The Canadian Infrastructure Report Card

WATERLOO PUBLIC TRANSPORTATION INITIATIVE
Advancing Transit Solutions through Research
Realized / Expected Benefits: Transport

The “not-so-obvious” benefits of rapid transit:

- Higher density / increased transit ridership reduce overall energy consumption – improves air quality;
- Rapid transit complementary to walking and cycling – improves activity and lowers society’s health care costs;
- Rapid transit less expensive – decreases household transportation expenditures and increases equity.
Challenges Encountered

Engaging the public in meaningful dialog

- Technology advocates with strong opinions;
- General anti-government sentiment;
- Transportation “expertise” amongst public.
Challenges Encountered

Engaging the public in meaningful dialog

- Public forums often dominated by polarized opinions;
- Little incentive for citizens with initially-neutral or uninformed viewpoints on transit issues to participate;
- Public benefits of transit – environmental, equity, land use are indirect and difficult to convey.

*Meaningful engagement can be achieved through the customization and internalization of benefits, costs and impacts at a personal level.*
Lessons Learned

- Identify the direct stakeholders (e.g. current transit users) and indirect stakeholders (e.g. suburban residents) before engagement commences and customize messaging.

- Find ways to make experience more tangible – for many this is economic (e.g. property tax implications)

- Provide ranges of information on topics about which uncertainty exists.

- Identify / empower project “champions” and advocates.

- Recognize local challenges and address directly.
Acknowledgements and Contacts

More Info:
http://rapidtransit.regionofwaterloo.ca

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Jeff Casello – jcasello@uwaterloo.ca
http://civil.uwaterloo.ca/wpti